



Box Seq & Spec #4

ATTORNEY'S DOCKET NUMBER: 2002850-0009 (S98-161)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Fount *et al.*
Serial No.: 09/728,720
Filed: December 1, 2000
For: PREVENTION AND TREATMENT OF HCV INFECTION EMPLOYING
ANTIBODIES DIRECTED AGAINST CONFORMATIONAL EPITOPES

Box SEQUENCE
Assistant Commissioner for Patents
Washington, DC 20231

Sir:

STATEMENT UNDER 37 CFR §1.821

Applicants enclose herewith a substitute paper copy and a substitute computer-readable diskette copy of the Sequence Listing required under 37 C.F.R. 1.821-1.825 for the above-referenced patent application. The substitute copies of the sequence listing submitted herewith include no new matter.

The undersigned states that the content of the paper copy of the Sequence Listing contains the identical information as does the computer-readable diskette copy.

Please charge any fees that may be required or credit any overpayments to our Deposit Account No. 03-1721.

Respectfully submitted,

C. Hunter Baker, M.D., Ph.D.
Reg. No.: 46,533

CHOATE, HALL & STEWART
Exchange Place
53 State Street
Boston, MA 02109
(617) 248-5000
Dated: March 20, 2001

3196623_1.DOC

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner For Patents, Washington, D.C. 20231
on March 20, 2001

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/728,720

DATE: 12/18/2000
TIME: 14:02:22

Input Set: A:\Stanfor1.app

Output Set: N:\CRF3\12182000\I728720.raw

Does Not Comply
Corrected Diskette Needed

PR 4-5

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3 <110> APPLICANT: Fong, Steven K.H.
 4 Hadlock, Kenneth G.
 5 <120> TITLE OF INVENTION: Prevention and Treatment of HCV Infection Employing
 6 Antibodies that Inhibit the Interaction of HCV Virions
 7 with Their Receptor.
 8
 9 <130> FILE REFERENCE: 2002850-0009
 10 <140> CURRENT APPLICATION NUMBER: US/09/728,720
 11 <141> CURRENT FILING DATE: 2000-12-01
 12 <160> NUMBER OF SEQ ID NOS: 35
 13 <170> SOFTWARE: PatentIn Ver. 2.1
 14 <210> SEQ ID NO: 1
 15 <211> LENGTH: 160
 16 <212> TYPE: DNA
 17 <213> ORGANISM: Hepatitis C Virus
 18 <400> SEQUENCE: 1
 19 ctcacactgga ttcaccaaag tgtgcggagg gccctcctgt gtcacggag gggcgggcaa 60
 20 caacacccctg cactgcccca ctgattgctt ccgcaagcat ccggagacca cactactctg 120
 21 gtgcggctcc ggtccctgga ttcacccag gtgcctgtc 160
 22 <210> SEQ ID NO: 2
 23 <211> LENGTH: 160
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Hepatitis C Virus
 26 <400> SEQUENCE: 2
 27 ctcacactgga ttcaccaaag tgtgcggagg gccctcctgt gtcacggag gggcgggcaa 60
 28 caacacccctg cactgcccca ctgattgctt ccgcaagcat ccggagacca cactactctg 120
 29 gtgcggctcc ggtccctgga ttcacccag gtgcctgtc 160
 30 <210> SEQ ID NO: 3
 31 <211> LENGTH: 160
 32 <212> TYPE: DNA
 33 <213> ORGANISM: Bovine Pancreatic Ribonuclease A
 34 <400> SEQUENCE: 3
 35 tagtaactggg ttcactaaga cgtgcggagg ccccccctgt aacacgggg gggcgggtaa 60
 36 ccgcaccltg atctgcccca cggactgctt ccggaagcac ccgaggcta cttaacacaa 120
 37 atgtggctcg gggccctggt tgacaccta gtgcctagta 160
 38 <210> SEQ ID NO: 4
 39 <211> LENGTH: 160
 40 <212> TYPE: DNA
 41 <213> ORGANISM: T7 Bacteriophage
 42 <400> SEQUENCE: 4
 43 tggacacggg ttcaccaaaga cgtgtgggg ccccccctgt aacacgggg gggcgggcaa 60
 44 taacaccltg acttgcccca cggactgctt ccggaagcac ccgaggcta cttaacacaa 120
 45 atgtggctcg gggccctggt tgacaccta gtgcctagta 160
 46 <210> SEQ ID NO: 5
 47 <211> LENGTH: 166
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Bacterial Protein
 50 <400> SEQUENCE: 5

RAW SEQUENCE LISTING

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Input Set : A:\Stanfor1.app

Output Set: N:\CRF3\12182000\I728720.raw

69 ctccactggc tacaccaaga ctgcggggc accacccctgc cgcattlagag ctgacttcaa 60
70 tgcacagcatg gacttgttgt gccccacgga ctgttttagg aagcatctcg ataccacctt 120
71 catcaaatgt ggcctctgggc cctggctcac gccaaagtgc ctgctc 166
74 <210> SEQ ID NO: 6
75 <211> LENGTH: 167
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
82 <400> SEQUENCE: 6
83 ctccactgtt tcccaaaaac ttgcggggc cccacccctgc gcacacagagc tgacttcaat 60
84 gccacgacgg accctctgtg gccccacgga tgtttcaga aagcatctga agccacttac 120
85 atcaaatgtg gctctgggc cccctctgta cgcacaaagt cctcata 167
88 <210> SEQ ID NO: 7
89 <211> LENGTH: 166
90 <212> TYPE: DNA
91 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
96 <400> SEQUENCE: 7
97 cgggactggg ttcactaaga catggcgtgc accaccttgc cgcattagga aagactacaa 60
98 cagcactatc gatttatlgt gccccacaga ctgttttagg aagcaccag atgtactcta 120
99 tcttaagtgt ggaagcgggc ctgtgttaac tcccaggtgc atggtt 166
102 <210> SEQ ID NO: 8
103 <211> LENGTH: 166
104 <212> TYPE: DNA
105 <213> ORGANISM: Hepatitis C Virus
107 <400> SEQUENCE: 8
108 tgggactggg ttcactaaga catggcgtgc accaccttgc cgcattagga gggactgcaa 60
109 cgggaacctc gacctattgt gccccacaga ctgtttcaga aagcaccag atgtactcta 120
110 ccttaagtgt ggaagcgggc ctgtgttaac tcccaggtgc atggtt 166
112 <210> SEQ ID NO: 9
113 <211> LENGTH: 160
114 <212> TYPE: DNA
115 <213> ORGANISM: Hepatitis C Virus
116 <400> SEQUENCE: 9
117 ctcacttggg ttcaccaaaag tgtgcgggag gcccccctgt gtcacggag gggcgggcaa 60
118 caacaccttg cgtgcccaca ctgattgttt ccgcaagcat ccggaagcca cgtactctcg 120
119 gtcgggctcc ggtccctgga ttacgcccag gtgcctggtc 160
124 <210> SEQ ID NO: 10
125 <211> LENGTH: 160
126 <212> TYPE: DNA
127 <213> ORGANISM: Hepatitis C Virus
129 <400> SEQUENCE: 10
130 tggcacaggg ttcaccaaga cgtgtggggc ccccctatgt aacatcgggg gggcgggcaa 60
131 taacaccttg acttgcccac cggactgttt ccggaagcac cccgaggcca ctacaccaa 120
132 atgtgggtcg gggccttggc tgacacctag gtgcatagtt 160
135 <210> SEQ ID NO: 11
136 <211> LENGTH: 164

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Input Set : A:\Stanfor1.app
Output Set: N:\CRF3\12182000\I728720.raw

137 <212> TYPE: DNA
138 <213> ORGANISM: Hepatitis C Virus
140 <400> SEQUENCE: 11
141 ctccactgtt tcaccaaacc ttggggcgca ccacctgcc gcatcagagc tgactttaat 60
142 gccagcaggg acctgctgtg cccacaggac tgtttcagga agcatcctga agccacttac 120
143 atcaaatgtg gctctgggac cctgtgacgc caaagtgcct gata 164
146 <210> SEQ ID NO: 12
147 <211> LENGTH: 167
148 <212> TYPE: DNA
149 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
154 <400> SEQUENCE: 12
155 tgggactggg ttactaaga catgggtgc accacctgc cgcattagga gggactgcaa 60
156 cggaaacctc gacctattat gccccacaga clyttcaga aagcaccag atactaccta 120
157 ccttaagtgt gggcggggg ccttggttga ccccaaatg catggtg 167
160 <210> SEQ ID NO: 13
161 <211> LENGTH: 8
162 <212> TYPE: PRT
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Description of Artificial Sequence: Flag Epitope
168 <400> SEQUENCE: 13
169 Asp Tyr Lys Asp Asp Asp Asp Lys
170 1 5
173 <210> SEQ ID NO: 14
174 <211> LENGTH: 10
175 <212> TYPE: PRT
176 <213> ORGANISM: T7 Bacteriophage
178 <400> SEQUENCE: 14
179 Met Ala Ser Met Thr Gly Gly Gln Met Gly
180 1 5 10
183 <210> SEQ ID NO: 15
184 <211> LENGTH: 15
185 <212> TYPE: PRT
186 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <223> OTHER INFORMATION: Description of Artificial Sequence: S-Tag Sequence
191 <400> SEQUENCE: 15
192 Lys Glu Thr Ala Ala Ala Lys Phe Glu Arg Gln His Met Asp Ser
193 1 5 10 15
196 <210> SEQ ID NO: 16
197 <211> LENGTH: 20
198 <212> TYPE: DNA
199 <213> ORGANISM: Hepatitis C Virus
201 <400> SEQUENCE: 16
202 cgcgcacraa gtagggact
205 <210> SEQ ID NO: 17
206 <211> LENGTH: 21

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RAW SEQUENCE LISTING

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Input Set : A:\Stanfor1.app

Output Set: N:\CRF3\12182000\I728720.raw

207 <212> TYPE: DNA
 208 <213> ORGANISM: Hepatitis C Virus
 210 <400> SEQUENCE: 17
 w--> 211 cgcattggcct gggayatgat g
 214 <210> SEQ ID NO: 18
 215 <211> LENGTH: 32
 216 <212> TYPE: DNA
 217 <213> ORGANISM: Hepatitis C Virus
 219 <400> SEQUENCE: 18
 220 cgaagcttca tatgatcgt ggtgcact gg
 223 <210> SEQ ID NO: 19
 224 <211> LENGTH: 38
 225 <212> TYPE: DNA
 226 <213> ORGANISM: Hepatitis C Virus
 228 <400> SEQUENCE: 19
 229 gcggtccct qcaactaca acatgcttga gaattcca
 232 <210> SEQ ID NO: 20
 233 <211> LENGTH: 34
 234 <212> TYPE: DNA
 235 <213> ORGANISM: Hepatitis C Virus
 237 <400> SEQUENCE: 20
 238 cgcattatgga gctcgcggg gcccaactgg ggt
 241 <210> SEQ ID NO: 21
 242 <211> LENGTH: 38
 243 <212> TYPE: DNA
 244 <213> ORGANISM: Hepatitis C Virus
 246 <400> SEQUENCE: 21
 247 gctctagact gcagctatat gccagcctga agcaccat
 250 <210> SEQ ID NO: 22
 251 <211> LENGTH: 34
 252 <212> TYPE: DNA
 253 <213> ORGANISM: Hepatitis C Virus
 255 <400> SEQUENCE: 22
 256 cactcgagcc atggttggcg gggctcattg gggc
 259 <210> SEQ ID NO: 23
 260 <211> LENGTH: 40
 261 <212> TYPE: DNA
 262 <213> ORGANISM: Hepatitis C Virus
 264 <400> SEQUENCE: 23
 265 tcgaattcgg atctacaaa gcacctttta ggagataagg
 268 <210> SEQ ID NO: 24
 269 <211> LENGTH: 34
 270 <212> TYPE: DNA
 271 <213> ORGANISM: Hepatitis C Virus
 273 <400> SEQUENCE: 24
 274 cgtcggagcc atggttttcg gggccattg ggtg
 277 <210> SEQ ID NO: 25
 278 <211> LENGTH: 40
 279 <212> TYPE: DNA

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see item 10 on Eva Anna
 sheet

RAW SEQUENCE LISTING
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Input Set : A:\Stanfor1.app
 Output Set: N:\CRF3\12182000\I728720.raw

280 <213> ORGANISM: Hepatitis C Virus
 282 <400> SEQUENCE: 25
 283 tggatttcgg atctacaga gacgttttaa ggaagtaggc 40
 286 <210> SEQ ID NO: 26
 287 <211> LENGTH: 23
 288 <212> TYPE: DNA
 289 <213> ORGANISM: Hepatitis C Virus
 291 <400> SEQUENCE: 26
 W--> 292 tggttcgggt gywntggat gaa 23
 295 <210> SEQ ID NO: 27
 296 <211> LENGTH: 26
 297 <212> TYPE: DNA
 298 <213> ORGANISM: Hepatitis C Virus
 300 <400> SEQUENCE: 27
 W--> 301 taatgccana rockrtangg gtagtc 26
 304 <210> SEQ ID NO: 28
 305 <211> LENGTH: 379
 306 <212> TYPE: PRT
 307 <213> ORGANISM: Artificial Sequence
 309 <220> FEATURE:
 310 <223> OTHER INFORMATION: Description of Artificial Sequence: Display Vector
 311 Sequence with E2 insert of sflb-E2
 313 <400> SEQUENCE: 28
 314 Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
 315 1 5 10 15
 317 Gly Ser Thr Gly Asp Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Gly Ala
 318 20 25 30
 320 Gln Pro Ala Arg Ser Thr Thr Tyr Thr Thr Gly Gly Ala Ala Ser Arg
 321 35 40 45
 323 Thr Thr Gly Thr Phe Thr Ser Leu Phe Asn Ala Gly Ser Ser Gln Lys
 324 50 55 60
 326 Ile Gln Leu Ile Asn Thr Asn Gly Ser Trp His Ile Asn Arg Thr Ala
 327 65 70 75 80
 329 Leu Asn Cys Asn Asp Ser Leu Asn Thr Gly Phe Leu Ala Ala Leu Phe
 330 85 90 95
 332 Tyr Val His Arg Phe Asn Ala Ser Gly Cys Pro Ala Arg Met Ala Ser
 333 100 105 110
 335 Cys Arg Ser Ile Asp Ala Phe Asp Gln Gly Trp Gly Pro Ile Thr Tyr
 336 115 120 125
 338 Ala Glu Ser His Ser Ser Asp Gln Arg Pro Tyr Cys Trp His Tyr Ala
 339 130 135 140
 341 Pro Lys Pro Cys Gly Ile Val Pro Ala Ser Gln Val Cys Gly Pro Val
 342 145 150 155 160
 344 Tyr Cys Phe Thr Pro Ser Pro Val Val Val Gly Thr Thr Asp His His
 345 165 170 175
 347 Gly Val Pro Thr Tyr Ser Trp Gly Glu Asn Glu Thr Asp Val Leu Leu
 348 180 185 190
 350 Leu Asn Asn Thr Arg Pro Pro Gln Gly Asn Trp Phe Gly Cys Thr Trp
 351 195 200 205

*see item 10
 on Enr Summary Sheet*

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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/728,720

DATE: 12/18/2000
TIME: 14:02:23

Input Set : A:\Stanfor1.app
Output Set: N:\CRF3\12182000\I728720.raw

L:12 M:270 C: Current Application Number differs. Replaced Current Application Number
L:211 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:17
L:211 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:17
L:211 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:17
L:211 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:17
L:211 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:17
L:292 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:26
L:292 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:26
L:292 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:26
L:292 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:26
L:292 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:26
L:301 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27
L:301 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:27
L:301 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:27
L:301 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:27
L:301 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:27

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